

ABSTRACT

5 In a method for increasing the power output of a
combined-cycle power station, comprising at least one
gas turbo group, at least one heat recovery steam
generator and at least one steam turbo group, with the
gas turbo group comprising at least one compressor, at
10 least one combustion chamber and at least one gas
turbine, the heat recovery steam generator having at
least one pressure stage and the steam turbo group
comprising at least one steam turbine, in which
combined-cycle power station air is compressed in a
15 compressor, is then supplied as combustion air to a
combustion chamber, the hot gas which is produced there
is passed to a gas turbine, and the exhaust gas from
the gas turbine is used in a heat recovery steam
generator to produce steam for a steam turbo group, an
20 immediate and rapid increase in the power output is
achieved, and an additional power output from the
combined-cycle power station is maintained in safe
operating conditions, in that an supplemental firing is
arranged to provide additional heating for the exhaust
25 gas from the gas turbine and in that the combustion
chamber or the gas turbo group is supplied with more
fuel, and the supplemental firing is switched on at the
same time, for immediately, rapidly and temporarily
increasing the power output of the combined-cycle power
30 station, and in that the power output of the gas turbo
group is reduced again to the extent that the
additional steam power produced as a result of the
supplemental firing is also provided via the steam
turbo group as power.

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Figure 2